



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/073,948	02/14/2002	John Rhoades	032658-024	6384
42015	7590	06/24/2005	EXAMINER	
POTOMAC PATENT GROUP, PLLC P. O. BOX 270 FREDERICKSBURG, VA 22404			PAN, DANIEL H	
		ART UNIT	PAPER NUMBER	
		2183		

DATE MAILED: 06/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/073,948	RHOADES ET AL.	
	Examiner	Art Unit	
	Daniel Pan	2183	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 18 April 2005.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-9,11-38,40-44,46-50,52-56 and 58 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-9,11-38,40-44,46-50,52-56 and 58 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 30 September 2002 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>09/30/02</u> | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____. |

1. Claims 1-9, 11-16, 17-38, 40-44, 46-50, 52-56, 58 remain for examination. Claims 59, 60 have been added. Claims 10, 18, 39, 45, 51, 57 have been canceled.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-9, 17, 19, 20-22, 32, 34, 38, 40, 44, 46, 50, 52, 56, 59, 60 are rejected under 35 U.S.C. 102(a) and (b) as being anticipated by Childers et al. (5,986,913).

As to the amended claim 1, the scope of amended claim is not distinguishable from the original scope. For example, the distribution of the whole data packets as amended is within the scope of the distribution of data packets in whole or in part as originally claimed.

3. As to newly added claims 59, 60, 40, 46, Childers also included the receiving and the outgoing of data packets (see the output in fig. 2, see also the parallel output lines in col. 8, lines 17-26).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 12,13 , 35, 41 , 47,53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Childers et al. (5,986,913) in view of Gove et al. (5,371 ,896).
5. As to claims 12,13,35,41,47,53, this is a new ground of rejection due to the newly amended limitations of claim 12 into claim 1. Childers did not specifically show the stand-by operation as claimed. However, Gove disclosed SIMD including a plurality of operable to receive data and included a stand-by operation (see col.56, lines 48-52). It would have been obvious to one of ordinary skill in the art to use Gove in Childers for including the standby operation as claimed because the use of Gove could provide Childers the ability to avoid the error caused by the bus contention of the data traffic , and it could be done by reconfiguring the stand-by mode of Gove into Childers with modified control parameters (e.g. the busy and wait signals) so that the specific stand-by operation of Gove could be recognized by Childers, and Childers did disclose a delay time of the input data to complete his pipeline (see col.3, lines 60-67, col.4, lines 1-6), which was a suggestion of the need of providing a stand-by , wait cycle, or the like

Art Unit: 2183

, into the system in order to relieve the delay caused by the input data, and in doing so, provided a motivation.

6. As to claim 47, Gove also included operation (see the wait signal in plurality of integrated circuits (see fig.I).

7. Claims 23-31, 58 are rejected under 35 U.S.C. 102(a) and (b) as being anticipated by Horst (5,404,550).

8. As to claim 23, no change has been made.

9. Claims 14,15, 33,36,37, 42,43, 48,49, 54,55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brown (5,872,993) in view of Childers et al. (5,986,913).

10. No change has been made in claims 14, 15.

11. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Childers et al. (5,986,913) in view of Brown (5,872,993) .

12. As to claim 16, new ground of rejection has been applied in response to the amended claim 16. The limitation of parent claim 1 have been discussed in , therefore, it will not be repeated herein. Childers did not specifically show the hardware accelerator as claimed. However, Brown disclosed a hardware accelerator unit (e.g. see fig.3 (HW ACC 2). It would have been obvious to one of ordinary skill in the art to use

Brown in Childers because the use of Brown could provide capability into Childers to accept additional processing function of the input data

13. The rejections to claims 1-9, 11,14, 15,17,19-34,36-38,40,42-44,46,48-50,52, 54-56, 58 are maintained and incorporated by reference the last Office action on 11/17/04. New claims 59, 60 have been discussed in Paragraph 3 of this action. New ground of rejections to claims 12,13 , 16, 35, 41 , 47,53 have been discussed in paragraph # 4,5,11,12 in this action.

14. The response by applicant on 04/18/05 has been fully considered but is not persuasive.

15. In the remarks, applicant argued that :

- a) applicant's allocation is based on data bandwidth rather than the pixel number;
- b) applicant's stand-by mode is not the pause in Gove;
- c) Horst is not I/O systems.

16. As to a) above, applicant is reminded that unclaimed features cannot be used to overcome the prior art (e.g. see CCPA In re Lundenberg & Zuschlag, 113, USPQ 530, 534 (1957)). For example, nowhere does applicant claim recite that data bandwidth is not pixel numbers.

17. As to b) above, no specific format or the distinction between the stand-by operation and a pause operation has been reflected into the claim. Therefore, it is read as any signal to hold, pause, or the like, based on the contention (see the simultaneous accesses to the memory and the generation of pause all PEs in fig.30).

18. As to c) above, Horst disclosed input and output system for transferring requests from the processing elements (see the DSP 300 and second DSP 360, col.6, lines 45-49) to the hardware accelerator (e.g. see the DFP as an interlace control in col.25, lines 5d0, 01.27, lines 50-67, col.28, lines'1-39), therefore, it is directed to I/O systems.

19. Childers et al. (5,986,913) , Gove et al. (5,371 ,896), Brown (5,872,993), and Horst (5,404,550) were cited to applicant on the record, therefore copies are not provided herein..

Applicant's amendment (to claims 12,13 , 16, 35, 41 , 47,53) necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dan Pan whose telephone number is 703 305 9696, or the new number 571 272 4172. The examiner can normally be reached on M-F from 8:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chan, can be reached on 703 305 9712, or the new number 571 272 4162. The fax phone number for the organization where this application or proceeding is assigned is 703 306 5404.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

21 Century Strategic Plan

DANIEL H. PAN
PRIMARY EXAMINER
GROUP

Application/Control Number: 10/073,948
Art Unit: 2183

Page 8